

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

<b>THE UNITED STATES OF AMERICA,</b>	:	
	:	
<b>Plaintiff,</b>	:	<b>CRIM. NO. 06-95-01</b>
<b>vs.</b>	:	
	:	
<b>LACEY GRAVES,</b>	:	
	:	
<b>Defendant.</b>	:	

**DuBOIS, J.**

**DECEMBER 20, 2006**

**MEMORANDUM**

**I. INTRODUCTION**

Defendant, Lacey Graves, is charged in an indictment with one count of armed bank robbery and one count of using a firearm during the commission of a violent felony. The charges arise out of an armed bank robbery of a Univest Bank branch in Warminster, Pennsylvania, on January 18, 2006.

Several evidentiary motions are currently before the Court. First, Graves moved to preclude the Government's use at trial of Deoxyribonucleic Acid ("DNA") evidence from an umbrella and from a pair of sneakers.<sup>1</sup> The admissibility of this evidence focuses on the probative value and prejudice of DNA evidence of low statistical significance, and not on whether the scientific methodology underlying the DNA analysis is reliable under Daubert v.

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<sup>1</sup> Graves also moved "conditionally, only if the Court rules that the Government's DNA evidence is admissible – for permission for [Graves's DNA expert] to testify" on the source of the DNA taken from the sneakers (i.e., blood, skin cells, or semen). (Def. Rep. to Gov. Sec. Supp. Resp. at 4.) By Order dated December 11, 2006, the Court instructed the Government to file a supplemental response on this issue. The Court defers ruling on the admissibility of this expert testimony until the Government has had the opportunity to respond. For further discussion of the proffered testimony of Graves's DNA expert, see *supra* note 9.

Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993). Second, Graves moved to preclude the use of a shoe print comparison involving impressions lifted from the crime scene. The admissibility of this evidence turns on the probative value and prejudice of a shoe print comparison that did not result in a definitive match, and upon the sufficiency of the data used to make this shoe print comparison. Third, the Government moved to require Graves to establish, through a hearing, the admissibility of proffered expert testimony relating to the reliability of eyewitness identification. The admissibility of this evidence will depend upon whether the expert testimony is reliable and fits the facts of this case.

On November 1, 2006, the Court held an evidentiary hearing to address the motions *in limine* (“Evidentiary Hearing”). For the reasons that follow, the Court holds: (1) the umbrella DNA evidence is inadmissible; (2) the sneaker DNA evidence is admissible; (3) the shoe print comparison is admissible; and (4) the proffered expert testimony on the reliability of eyewitness identification is admissible.

## **II. BACKGROUND**

On March 7, 2006, Graves was charged in an indictment with one count of armed bank robbery, in violation of 18 U.S.C. § 2113(d), and one count of using a firearm during the commission of a violent felony, in violation of 18 U.S.C. § 924(c).

Graves allegedly entered a Univest Bank branch in Warminster, Pennsylvania on January 18, 2006, displayed a handgun, vaulted over the teller counter, and stole \$6,421 in cash. (Gov’t Mot. at 1.) According to the Government, the Assistant Manager of the branch noticed the robber approaching the bank on the outside sidewalk prior to the robbery. The robber was

allegedly carrying an umbrella that he moved to shield his face from the Assistant Manager. (Id. at 2.) According to the Government, the Assistant Manager then watched the surveillance monitors as the robber entered and robbed the bank. Later, the Assistant Manager positively identified Graves as the robber from a photo array. (Id. at 2.) The photo array consisted of eight photographs shown simultaneously to the eyewitness. (Pretrial Motions Hearing, Gov't Ex. 1.)

The physical evidence in the case includes: (1) the umbrella that the robber allegedly carried and discarded at the bank; (2) impressions of the treads of both sneakers allegedly worn by the robber that were lifted from the teller counter; (3) a pair of New Balance sneakers seized at Graves's girlfriend's residence; and (4) DNA samples taken from Graves. (Gov't Mot. at 3.)

The Government plans to call two expert witnesses at trial: (1) a forensic DNA expert to testify to her comparison of Graves's DNA to DNA recovered from the sneakers and umbrella; and (2) an expert on shoe print comparison to testify to his comparison of the counter impressions to impressions taken of the New Balance sneaker treads. (Id. at 4.) Graves intends to call an expert on the reliability of eyewitness identification to assist the jury in interpreting the eyewitness identification evidence in the Government's case-in-chief. (Def. Resp. at 1.) The Court will describe the proffered testimony of each expert in turn.

#### **A. Defendant's Eyewitness Identification Expert Testimony**

Dr. Solomon Fulero, who holds a Ph.D. in psychology and has written numerous papers on forensic psychology, is offered by Graves as an expert witness on factors affecting eyewitness accuracy during the acquisition, retention, and retrieval memory process stages. (Evidentiary Hearing, Def. Ex. 1.) The Government challenges the admissibility of the proffered testimony

with respect to five of Dr. Fulero's conclusions: (1) simultaneous display of a photo array to an eyewitness, as opposed to sequential display, increases risk of misidentification; (2) a photo array may be suggestive if certain elements of the defendant's photo differ from the rest of the photos in the array; (3) the certainty of an eyewitness with respect to his or her identification has little correlation with the accuracy of the identification; (4) cross-racial identifications are less reliable than same-racial identifications; and (5) temporal opportunity to view the subject impacts the reliability of the eyewitness's identification. (Gov't Supp. Mot. at 2.)

**B. The Government's Shoe Print Expert Testimony**

A search of the apartment of Graves's girlfriend resulted in the seizure of a pair of New Balance sneakers. (Gov't Mot. at 3; Def. Mot. at 4.) A Forensic Shoeprint/Tiretread Examiner at the Federal Bureau of Investigation ("FBI") submitted a report ("Sneaker Report") based upon his forensic comparison between the New Balance sneakers and the footwear impressions left by the robber on the teller counter. (Gov't Mot. at 6; Ex. B to Def. Mot. at 2.) According to the Sneaker Report, one of the footwear impressions lifted from the counter "corresponds in design and approximate physical size" with the left New Balance sneaker; and one patterned impression lifted from the counter "shares similar design features with the respective portion" of the right New Balance sneaker. (Ex. B to Def. Mot. at 2.) The Sneaker Report reaches no further conclusions, stating that "[d]ue to the limited detail and movement present in the aforementioned impressions, more positive associations were not made." (Id.)

**C. The Government's DNA Expert Testimony**

A Forensic Biology Examiner at the FBI submitted a report ("DNA Report") based on her

examination of the New Balance sneakers and the umbrella that the robber abandoned at the crime scene. According to the DNA Report, the examiner isolated DNA from swabbings taken from inside both of the New Balance sneakers, and employed PCR/STR typing to compare the sneaker DNA to Graves's DNA.<sup>2</sup> (Ex. A to Def. Mot. at 1-2.) The DNA Report recites that the PCR/STR results from each sneaker disclose the presence of DNA from three or more individuals. (Id. at 2.) It goes on to explain that the probability of selecting an unrelated individual at random from a general population who could be a potential contributor ("random match probability") to the mixture of DNA detected on the left sneaker is approximately 1 in 2,900 from the African American population, while the random match probability is approximately 1 in 3,600 with respect to the right sneaker. (Id. at 4-5).

The forensic examiner also isolated DNA from the umbrella, and compared the umbrella DNA to Graves's DNA. (Id. at 5.) The PCR/STR typing results from the umbrella DNA sample disclose the presence of DNA from more than one individual. (Id.) Based upon the DNA Report, the random match probability with respect to the DNA detected on the umbrella is approximately 1 in 2 from the African American population. (Id.)

With respect to both the sneaker and the umbrella DNA evidence, the DNA Report does not specify the origin of the cells from which the forensic examiner extracted the DNA (i.e., skin cells, saliva, perspiration, or blood). (See id.) According to the forensic examiner, "[t]he DNA

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<sup>2</sup> "[E]xperts must resort to PCR/STR testing when the evidence sample is old, degraded, or in insufficient quantity to conduct an analysis using another DNA methodology . . . . PCR testing admits its basic potential for error: it is founded upon random match probabilities." United States v. Morrow, 374 F.Supp.2d 51, 65 (D.D.C. 2005). For further discussion of PCR/STR testing, see *supra* note 6.

analysis method employed by the FBI DNA Unit I does not determine from where the DNA is isolated . . . .” (Ex. A to Gov’t Sec. Supp. Resp.)

### **III. DEFENDANT’S EXPERT WITNESS ON EYEWITNESS IDENTIFICATION**

Pursuant to United States v. Brownlee, 454 F.3d 131 (3rd Cir. 2006), the Government moved for a hearing requiring Graves to establish that the proffered expert testimony of Dr. Solomon Fulero on the reliability of eyewitness identification comports with the reliability and fit requirements of Federal Rule of Evidence 702.<sup>3</sup> (Gov’t Supp. Mot. at 2.) Graves asserts that the expert testimony is reliable and is crucial in aiding the jury to interpret the identification evidence in the Government’s case-in-chief. (Def. Resp. at 1.)

The Court conducted a hearing on the issue on November 1, 2006. Based on the hearing evidence, the arguments of counsel, and the agreement of the Government, the Court concludes that, under Rule 702, Dr. Fulero’s expert testimony is reliable, fits the facts of this case, and is unlikely to overwhelm or mislead the jury. Thus, the proffered expert testimony is admissible.

#### **A. Legal Standard**

The Third Circuit “has construed Rule 702 as embodying ‘three distinct substantive restrictions on the admission of expert testimony: qualifications, reliability, and fit.’” United States v. Mathis, 264 F.3d 321, 335 (3d Cir. 2001) (quoting Elcock v. Kmart Corp., 233 F.3d

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<sup>3</sup> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

734, 741 (3d Cir. 2000)). “Rule 702 may permit a defendant ‘to adduce, from an expert in the field of human perception and memory, testimony concerning the reliability of eyewitness identifications.’” United States v. Stevens, 935 F.2d 1380, 1397 (3d Cir. 1991) (quoting United States v. Downing, 753 F.2d 1224, 1226 (3d Cir. 1985)). Admission of such testimony “is not automatic but conditional.” Downing, 753 F.2d at 1226 (3d Cir. 1985). “First, the evidence must survive preliminary scrutiny in the course of an *in limine* proceeding conducted by the district judge.” Id.; see, e.g., United States v. Norwood, 939 F.Supp. 1132, 1134 (D.N.J. 1996) (describing an *in limine* hearing on the admissibility of expert testimony in the field of human perception and memory). Where an eyewitness identification is crucial in a case, the district court should not exclude expert testimony on reliability of eyewitness identification without conducting an *in limine* proceeding. See United States v. Sebetich, 776 F.2d 412, 419 (3d Cir. 1985) (“Because the government’s case . . . rested exclusively on [eyewitness] identification, and the identification was subject to the challenges described, at the very least a preliminary Downing hearing should have been held.”).

As the Third Circuit recently reiterated in Brownlee, 454 F.3d 131, “after conducting a preliminary hearing,” the court must

balance two factors: (1) the reliability of the scientific principles upon which the expert testimony rests, hence the potential of the testimony to aid the jury in reaching an accurate resolution of a disputed issue; and (2) the likelihood that introduction of the testimony may in some way overwhelm or mislead the jury.

Id. at 143 (applying the approach taken in Stevens, 935 F.2d at 1397 and citing Downing, 753 F.2d at 1226). Additionally, the proponent of expert testimony concerning the reliability of eyewitness identification must establish “fit” by providing an “explanation of precisely how the expert’s testimony is relevant to the eyewitness identifications under consideration.” Brownlee,

454 F.3d at 131.

## **B. Analysis**

Although the Government initially challenged five aspects of the proffered expert testimony, the Government conceded during the Evidentiary Hearing that each of these aspects of the testimony comported with Rule 702. Nevertheless, the Court addresses each aspect of the proffered expert testimony in turn.<sup>4</sup>

First, Graves proffers expert testimony that simultaneous display of a photo array to an eyewitness, as opposed to sequential display, increases the risk of misidentification. In this case, the eyewitness identified Graves from eight simultaneously-shown photographs, rather than from eight sequentially-shown photographs. At the Evidentiary Hearing, Dr. Fulero testified that numerous peer-reviewed studies have concluded that sequential protocols result in fewer misidentifications, referring in particular to a study cited in the U.S. Department of Justice publication Eyewitness Evidence: A Guide for Law Enforcement (“DOJ Guide”).<sup>5</sup> Dr. Fulero explained the scientific methodology underlying these studies, and stated that the results of the studies were statistically significant. (Evidentiary Hearing Transcript at 36-52.)

Second, Graves proffers expert testimony regarding the circumstances in which a photo

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<sup>4</sup> The Court’s analysis focuses on the fit and reliability of Dr. Fulero’s expert testimony rather than on his qualifications, which the Government has never disputed. The Court finds that Dr. Fulero, who holds a Ph.D. in psychology and has written numerous papers on forensic psychology, is qualified with respect to the proffered expert testimony. See Norwood, 939 F.Supp. at 1135 (holding an expert with similar qualifications to be qualified as an expert on the reliability of eyewitness testimony).

<sup>5</sup> Dr. Fulero was one of the authors of this study. See G.L. Wells, M. Small, S.D. Penrod, R.S. Malpass, S.M. Fulero, and C.A.E. Brimacombe, *Eyewitness Identification Procedures: Recommendations for Lineups and Photospreads*, 22 Law & Hum. Behav. 603 (1998).



array may be suggestive in-and-of itself. In this case, the lighting in Graves's photograph appears brighter than the other seven photographs, and Graves's photograph is the only photograph that shows freckles or pock marks. At the Evidentiary Hearing, Dr. Fulero testified that a photo array may be suggestive if the photograph of the defendant differs in certain respects from all of the other photographs. More specifically, Dr. Fulero cited the DOJ Guide, which states that the investigator should "select fillers which generally fit the witness description of the perpetrator" and should "[c]reate a consistent appearance between the suspect and fillers with respect to any unique or unusual feature . . . ." (DOJ Guide at 29.) Further, Dr. Fulero testified to the numerous peer-reviewed psychological studies that have concluded that this practice leads to fewer misidentifications. (Evidentiary Hearing Transcript at 54-64.)

Third, Graves proffers expert testimony that there is little to no correlation between the certainty of an eyewitness's identification and the accuracy of the identification. The purpose of this testimony is "[t]o rebut the natural assumption that . . . a strong expression of confidence indicates an unusually reliable identification . . . ." *Id.* at 144. In Brownlee, the Third Circuit held that the District Court erred in not admitting expert testimony pertaining to the "the lack of correlation between witness confidence in identification and the accuracy of that identification . . . ." 454 F.3d at 137, 144. The Brownlee court stated that an expert's "explication of the confidence/accuracy studies could prove helpful to the jury in assessing the reliability of [the eyewitnesses's] identifications. That witnesses oftentimes profess considerable confidence in erroneous identifications is fairly counterintuitive." *Id.* (citing Downing, 753 F. 2d at 1230 n.6).

In finding the proffered expert testimony reliable, the Brownlee court noted "that studies demonstrate the absence of a relationship between the confidence a witness has in his or her

identification and the actual accuracy of that identification” and that there was “[impressive] consistency of the results of these studies . . .” Id. at 143 (citing Downing, 753 F. 2d at 1230-31, 1242). On this issue, Dr. Fulero testified at the Evidentiary Hearing to several such studies, explained the scientific methodology underlying these studies, and stated that the results of the studies were statistically significant. (Evidentiary Hearing Transcript at 66-73.)

Fourth, Graves proffers expert testimony that cross-racial identifications are less reliable than same-racial identifications. In this case, the eyewitness and the robber are of different races. Dr. Fulero did not testify at the Evidentiary Hearing on this issue because, prior to his testimony, the Government conceded that this proffered expert testimony was admissible. In Brownlee, 454 F.3d 131, the Third Circuit confirmed that the District Court was correct in “allow[ing] expert testimony concerning cross-racial identification.” Id. at 140, 144 n.13. The Third Circuit has repeatedly recognized “the inherent unreliability of . . . cross-racial identifications . . . .” United States v. Reed, 173 F.App’x 184, 188 (3d Cir. 2006) (citing Stevens, 935 F.2d at 1405); see also United States v. Hannigan, 27 F.3d 890, 900 (3d Cir. 1994) (“Social science research, for example, has established beyond peradventure that witness identifications, especially when cross-racial . . . are quite unreliable.”).

Lastly, Graves proffers expert testimony that the temporal opportunity that an eyewitness had to view the subject impacts identification reliability. In this case, the eyewitness’s opportunity to view the face of the robber was brief because the robber moved the umbrella to shield his face. At the Evidentiary Hearing, Dr. Fulero explained that the psychology “research supports the conclusion that the longer the witness has to view the face, the more accurate the identification is” and that “especially in stressful events or complex events, people tend to

overestimate lengths of time.” (Evidentiary Hearing Transcript at 65-66); see also Hannigan, 27 F.3d at 900 (noting that research has established “that witness identifications, especially when . . . based on brief moments of observation, are quite unreliable.”).

Based upon Dr. Fulero’s testimony at the Evidentiary Hearing, the arguments of counsel, and the Government’s agreement, the Court concludes that each aspect of Graves’s proffered expert testimony is based upon sufficient data and is the product of reliable principles and methods. See Norwood, 939 F.Supp. at 1136 (admitting expert testimony in the field of human perception and memory where the proffered expert “described in detail the many [psychology] studies, which either he or other reputable experts in the field conducted, on which he relied in formulating his conclusions”). Further, based upon the circumstances in which the eyewitness viewed the robber and later identified Graves, the Court determines that the proffered expert testimony well fits the facts of this case and will be helpful to the jury in interpreting the eyewitness identification evidence in the Government’s case-in-chief. See Brownlee, 454 F.3d at 137, 144. Lastly, the Court finds little likelihood that introduction of this testimony may in some way overwhelm or mislead the jury. Thus, the proffered expert testimony on the reliability of eyewitness identification is admissible.

#### **IV. THE GOVERNMENT’S DNA EVIDENCE**

Graves does not argue that the scientific methodology underlying the DNA analysis is unreliable under Daubert, 509 U.S. 579,<sup>6</sup> but rather argues that, because of the low statistical significance of the DNA evidence, its probative value is substantially outweighed by the danger

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<sup>6</sup> “[T]he defense is not seeking to consume the Court’s time by litigating a Daubert motion challenging the scientific methodology underlying DNA analysis.” (Def. Mot. at 1.)

of unfair prejudice and confusion of the issues under Federal Rule of Evidence 403.<sup>7</sup> (Def. Mot. at 1; Gov’t Mot. at 5.) The Government argues that the statistical significance of the DNA bears only on the weight that the jury should give the evidence, and not on its admissibility. (Gov’t Mot. at 6.) The Court concludes that, under Rule 403, the danger of unfair prejudice and confusion of the issues does not substantially outweigh the probative value of the sneaker DNA evidence, but does substantially outweigh the probative value of the umbrella DNA evidence. Thus, the sneaker DNA evidence is admissible and the umbrella DNA evidence is not admissible.

#### **A. Legal Standard**

Although the Third Circuit has not addressed directly the admissibility of DNA evidence of low statistical significance under Rule 403, it has stated that “overtly probabilistic evidence is no less probative of legally material facts than other types of evidence.” Hannigan, 27 F.3d at 893 (citing United States v. Bonds, 12 F.3d 540, 551-68 (6th Cir. 1993)). In Bonds, the Sixth Circuit noted that the DNA evidence was “clearly probative because [it] linked [the defendant] to the murder scene when no direct evidence existed to do so.” Id. at 567. The Bonds court acknowledged that “[t]he aura of reliability surrounding DNA evidence does present the prospect of a decision based on the perceived infallibility . . . especially in a case . . . where the evidence is largely circumstantial.” Id. at 567-568. Nevertheless, the Bonds court held that “the damaging nature of the DNA evidence to defendants and the potential prejudice [did] not require

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<sup>7</sup> “Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.” Fed. R. Evid. 403.

exclusion” under Rule 403. Id. at 568.

Courts in other circuits have “allowed DNA evidence into admission when the statistical significance of the data was relatively low and the probability of a random match in the relevant population was rather high.” United States v. Morrow, 374 F.Supp.2d 51, 63 (D.D.C. 2005). In doing so, the courts have been reluctant to enunciate a threshold that delineates the level of statistical significance required for DNA evidence to be admissible. Id. at 65.<sup>8</sup> DNA evidence of low statistical value is probative to show that a defendant cannot be excluded as a contributor to the DNA sample. Id.; United States v. Cuff, 37 F.Supp.2d 279, 282 (S.D.N.Y. 1999) (admitting DNA evidence where blood typing only supported the conclusion that the defendant could not “be excluded as the source of blood recovered from a crime scene”); United States v. Hicks 103 F.3d 837, 844 (9th Cir. 1996) (admitting DNA evidence where “none of the three perpetrators could be excluded as a contributor to the sample”).

“Given this framework, DNA evidence of a low statistical significance may remain proper under a Rule 403 analysis.” Morrow, 374 F.Supp.2d at 66. “Where the district court provides careful oversight, the potential prejudice of the DNA evidence can be reduced to the point where this probative value outweighs it.” United States v. Chischilly, 30 F.3d 1144, 1158

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<sup>8</sup> The Morrow case is particularly instructive on the admissibility of PCR/STR analysis: PCR testing, by its very nature, is not a test of . . . certainty. Rather, PCR is a technique to *exclude* certain individuals as possible contributors to a particular sample . . . . Instead of having specific accuracy cutoffs, PCR testing . . . is founded upon random match probabilities. . . . PCR testing presents the jury with a sliding scale wherein the evidence’s probative value depends . . . on its random match probability. Indeed, as numerous courts have realized, . . . it is improper for a court to step in and demarcate some arbitrary random match probability ratio, above which evidence will be hidden from the jury. Instead, the DNA evidence should be presented to the jury, which . . . may afford it the weight that it is due. Morrow, 374 F.Supp.2d at 65.

(9th Cir. 1994).

## **B. Analysis**

The DNA evidence in Morrow did not “show a significant statistical probability that [the defendants] contributed to” the DNA samples. 374 F.Supp.2d at 62. In that case, the random match probabilities of the DNA ranged “from a 1:12 probability of selecting an unrelated individual in the relevant population to a 1:1 probability of selecting an unrelated individual.” Id. at 62. The Morrow court held that “even DNA evidence with relatively low statistical significance may be admitted as probative evidence, provided that certain safeguards are afforded.” Id. at 68 (noting the “ameliorative potential of cross examination, counter-experts, and clarifying jury instructions”). In this case, the random match probability is approximately 1 in 2,900 with respect to the left New Balance sneaker and approximately 1 in 3,600 with respect to the right New Balance sneaker. In contrast, the random match probability is 1 in 2 with respect to the umbrella.

The Court recognizes the potential for the jury to misconstrue the statistical significance of the DNA evidence with respect to both the umbrella and the sneakers. See Morrow, 374 F.Supp. 2d at 66 (noting that the jury might confuse random match probability “with the potentially very different probability that the defendant is not the source of the matching samples”). Further, the Court recognizes the potential for confusion with respect to the sneaker DNA evidence, as this evidence merely links Graves to the sneakers, which themselves must be linked to the crime scene to be relevant.

Despite the two-step inference implicated by the sneaker DNA evidence, the Court concludes that the sneaker DNA evidence is far more probative than the umbrella DNA evidence

because the sneaker DNA evidence has a far lower random match probability. On this issue, the Court finds that--with cross-examination, proper explanations, and clarifying jury instructions--the probative value of the sneaker DNA evidence is not substantially outweighed by the danger of unfair prejudice and confusion of the issues.<sup>9</sup> See Morrow, 374 F.Supp. 2d at 68. In contrast, even with appropriate safeguards, the minimal probative value of the umbrella DNA evidence--in which half of the relevant population cannot be excluded as a contributor to the DNA sample--is substantially outweighed by the danger of unfair prejudice and confusion of the issues. Thus, the sneaker DNA evidence is admissible and the umbrella DNA evidence is not admissible.

## **V. THE GOVERNMENT'S SHOE PRINT EVIDENCE**

Graves argues that the sneaker impressions left on the bank teller counter do not constitute "sufficient facts or data" within the meaning of Rule 702, and that the probative value of the comparison between the counter impressions and the New Balance sneaker treads is substantially outweighed by the danger of unfair prejudice under Rule 403. (Def. Mot. at 6.) The Government argues that the fact that the shoe print comparison is not absolute bears only on the weight that the jury should give the evidence, and not on its admissibility. (Gov't Mot. at 6.) The Court concludes that: (1) under Rule 403, the probative value of the shoe print comparison evidence is not substantially outweighed by the danger of unfair prejudice and confusion of the

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<sup>9</sup> Graves also argues that the indeterminate origin of the cells from which the forensic examiner extracted the DNA (i.e., skin cells, saliva, perspiration, or blood) supports preclusion of the DNA evidence. According to Graves, the DNA samples were in fact isolated from dead skin cells, which "slough off of our bodies nearly continually . . . and can land on any surface." (Def. Mot. at 4-5.) Graves argues that "his DNA could easily have ended up on the sneaker" because he was a frequent visitor to his girlfriend's apartment. Id. The Court defers ruling on whether Graves's DNA expert can testify on the likely origin of the DNA samples, but concludes that--regardless of the origin of the cells--the probative value of the DNA evidence is not substantially outweighed by the danger of unfair prejudice and confusion of the issues.

issues; and (2) the sneaker impressions constitute “sufficient facts or data” within the meaning of Rule 702. Thus, the expert testimony on the shoe print comparison is admissible.

#### **A. Legal Standard**

As the Third Circuit stated in United States v. Carter, “expert testimony aiding the jury in making [shoe print] comparisons has long been judged admissible by the federal courts.” 2006 WL 1004384, at \*3 (3d Cir. Apr. 18, 2006) (citing United States v. Rose, 731 F.2d 1337, 1345-47 (8th Cir. 1984)). Other circuits have come to the same conclusion. See, e.g., United States v. Ross, 263 F.3d 844, 846 (8th Cir. 2001) (holding there was no error in admitting expert testimony by a FBI forensic examiner that “footprints . . . found in the snow at the scene of one of the bank robberies” matched the footwear seized from the defendant’s car); United States v. Hendershot, 614 F.2d 648, 654 (9th Cir. 1980).

#### **B. Analysis**

In Carter, “whether the boots [the defendant] was wearing when he was arrested six hours after the robbery could have made the boot print impressions found on the teller counter was probative of [the defendant’s] alleged participation in the robbery . . . .” 2006 WL 1004384, at \*3. The Third Circuit held that the “District Court did not abuse its discretion by admitting the testimony of the . . . print expert.” Id.; see also Rose, 731 F.2d at 1345-47 (holding that there was no error in admitting expert testimony comparing the defendant’s shoe to a shoe print lifted from a teller counter after an armed robbery by masked men).

Similarly in this case, an FBI examiner conducted forensic comparison between the New Balance sneakers and the footwear impression left by the robber on the teller counter. (Gov’t Mot. at 6; Ex. B to Def. Mot. at 2.) According to the Sneaker Report, one of the footwear



impressions lifted from the counter “corresponds in design and approximate physical size” with the left New Balance sneaker; and one patterned impression lifted from the counter “shares similar design features with the respective portion” of the right New Balance sneaker. “Due to the limited detail and movement present in the aforementioned impressions, more positive associations were not made.” (Ex. B to Def. Mot. at 2.)

Although the FBI examiner’s shoe print comparison did not result in a definitive match, the comparison is probative to show that the impressions left at the crime scene are consistent with the New Balance sneaker, and that the defendant cannot be excluded in this manner as a perpetrator of the robbery. Furthermore, the fact that the shoe print comparison did not result in a definitive match does not imply that the impressions left on the bank teller counter are insufficient to form a basis for a shoe print comparison. As in Carter, the shoe print comparison reveals that the footwear “*could* have made the . . . print impressions found on the teller counter . . .” 2006 WL 1004384, at \*3 (emphasis added). Finally, the Court finds that shoe print comparison evidence does not hold quite the same mystique of infallibility as does DNA evidence, and any unfair prejudice resulting from the shoe print comparison can be minimized through cross-examination, proper explanation, and clarifying jury instructions. Thus, the probative value of the shoe print comparison evidence is not substantially outweighed by the danger of unfair prejudice and confusion of the issues.

## **VI. CONCLUSION**

For the foregoing reasons, the sneaker DNA evidence is admissible, the umbrella DNA evidence is inadmissible, the shoe print comparison is admissible, and Graves’s proffered expert testimony on the reliability of eyewitness identification is admissible.

An appropriate order follows.

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

<b>THE UNITED STATES OF AMERICA,</b>	:	
	:	
<b>Plaintiff,</b>	:	<b>CRIM. NO. 06-95</b>
<b>vs.</b>	:	
	:	
<b>LACEY GRAVES,</b>	:	
	:	
<b>Defendant.</b>	:	

**ORDER**

**AND NOW**, this 20th day of December, 2006, upon consideration of the Government's Trial Memorandum and Motion In Limine (Document No. 46, filed October 10, 2006); the Defendant's Pretrial Motions In Limine (Document No. 51, filed October 20, 2006); the Government's Supplemental Trial Memorandum and Motion In Limine and Response to Defendant's Motion In Limine (Document No. 58, filed October 27, 2006); the Defendant's Supplemental In Limine Motion and Response to Government's Supplemental Motion In Limine (Document No. 60, filed October 30, 2006); the Government's Second Supplemental Response to Defendant's Motion In Limine (Document No. 67, filed November 14, 2006); and the Defendant's Reply to Government's Second Supplemental Response to Defendant's Motion In Limine (Document No. 69, filed December 4, 2006), **IT IS ORDERED** as follows:

1. The Government's Motion In Limine included in its Trial Memorandum (Document No. 46, filed October 10, 2006) and the Government's Motion In Limine included in its Supplemental Trial Memorandum (Document No. 58, filed October 27, 2006) are **GRANTED** with respect to the Government's request for an *in limine* evidentiary hearing, and **DENIED** to the extent the Government seeks to exclude the expert testimony of Dr. Solomon Fulero; and

2. The Defendant's Pretrial Motions In Limine (Document No. 51, filed October 20, 2006) are **GRANTED** with respect to the Government's DNA evidence related to the umbrella found at the crime scene, and such evidence with not be received in evidence, and **DENIED** with respect to the Government's DNA evidence related to the New Balance Sneakers and the Government's shoe print comparison evidence. With respect to that part of Defendant's motion which was denied, the Court **FINDS** that the probative value of the Government's DNA evidence related to the New Balance Sneakers and the Government's shoe print comparison evidence is not substantially outweighed by the danger of unfair prejudice and confusion of the issues under Federal Rule of Evidence 403.

**BY THE COURT:**

/s/ Honorable Jan E. DuBois  
**JAN E. DUBOIS, J.**